BEFORE THE PUBLIC UTILITIES COMMISSION

OF THE STATE OF HAWAI'I

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PUBLIC UTILITIES COMMISSION

In the Matter of PUBLIC UTILITIES COMMISSION Instituting a Proceeding to Investigate The Implementation of Feed-in Tariffs.	)	Docket No. 2008-0273

THE SOLAR ALLIANCE'S AND HAWAI'I SOLAR ENERGY ASSOCIATION'S RESPONSES TO INFORMATION REQUESTS FROM THE COMMISSION

AND

CERTIFICATE OF SERVICE

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HAWAI'I SOLAR ENERGY
ASSOCIATION

BEFORE THE PUBLIC UTILITIES COMMISSION

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THE SOLAR ALLIANCE'S AND HAWAI'I SOLAR ENERGY ASSOCIATION'S RESPONSES TO INFORMATION REQUESTS FROM THE COMMISSION

Pursuant to the Commission's transmittal dated February 19, 2010, The Solar Alliance ("SA") and Hawai'i Solar Energy Association ("HSEA") (together, "SA/HSEA") hereby submit the following responses to the Information Requests ("IRs") prepared by the Commission's consultants, the National Regulatory Research Institute and the National Renewable Energy Laboratory.

Respectfully submitted.

DATED: Honolulu, Hawai'i, March 4, 2010

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Respectfully submitted.

DATED: Honolulu, Hawaii,

RILEY SAITO

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PUC-IR-314

According to the HECO Companies' proposed Schedule FIT Tier 1 and Tier 2 Tariff and Agreement:

> "Except with the written consent of the Company, which consent shall not be unreasonably withheld, each physical address (defined as a single residential address or a single tax map key if a commercial or industrial facility) may not have more than one Facility of the same technology type contracted under this Schedule FIT."

Under what specific conditions would the HECO Companies allow or withhold consent for multiple facilities of the same type? Why is this "one facility" limitation necessary and in the public interest?

SA/HSEA Response:

SA/HSEA emphasize that the only reason to limit multiple facilities on the same tax map key would be to prevent "gaming" of the FIT tiers by artificially segmenting a large facility into smaller pieces. Otherwise, there are many potential legitimate reasons in the public interest to allow multiple facilities on a TMK, examples of which SA/HSEA raised in their comments filed on January 21, 2010. While SA/HSEA would support a limitation narrowly tailored to the segmentation/"gaming" concern, the proposed language causes more problems than it solves by granting the HECO Companies an undefined amount of discretion over decisions that would be better handled by disinterested third party to eliminate any hint of impropriety.

PUC-IR-326

How are the interconnection requirements and cost allocation for the proposed Schedule FIT Tier 1 and Tier 2 Tariff and Agreement different from those typically borne by developers in negotiated power purchase agreements?

SA/HSEA Response:

SA/HSEA note that, while examples of projects in the FIT Tiers 1 and 2 range developed under power purchase agreements are limited, in general, developers of projects in this size range have not borne any costs of interconnection, except in those cases where the project reaches the current 10 percent feeder circuit penetration limit and triggers an interconnection study. Even when such studies have been required, developers typically have not borne any additional interconnection costs. SA/HSEA again emphasize that their proposed FIT rates are "bare-bones" figures that assume the HECO Companies do not impose any such additional costs, but that the HECO Companies' proposal seeks to impose various interconnection costs on the developer and leaves them open-ended and unclear. See SA/HSEA's Comments at 11, 17.

PUC-IR-333 – To HECO Companies, SA, and HREA

Do owners of Tier 1 projects, such as residential PV solar systems, typically use debt to finance projects? If so, is such debt financing available? If so, under what typical debt rates and terms? If not, what are the typical sources for financing Tier 1 projects?

SA/HSEA Response:

There is currently no typical or standard approach to financing Tier 1-sized projects such as residential PV systems in Hawai'i. The list of purchase options for such systems includes, but is not limited to: cash purchase; credit card purchase; vendor finance programs; specialty PV finance programs (e.g., Wells Fargo); use of home equity lines of credit/loans; and use of specialty finance products designed for policy purposes (e.g., OHA/FHB Malama Loan). Presently, no data or conventional wisdom exists regarding the mix of these financing approaches.

Various forms of debt financing is available under different interest rates or terms, none of which can be considered typical or standard in the Hawai'i market. For example, specialty finance programs are designed essentially as one-year loans intended to carry the customer from the purchase date until receipt of the various tax incentives supporting the project. They may have modest interest rates to the customer during this period, but instead extract a significant fee from the installer. At the end of the one-year term the loans often flip into unsecured debt (sometimes actually associated with a credit card) at rates in the high teens.

Vendor finance programs use the same model, with an installer payment subsidizing the interest for the first year or portion of a year and a flip to a higher rate if the loan is not paid off around tax time. The amount of the installer payment depends on the length of the loan term (i.e., the later in the calendar year the lower the payment because the time until tax incentives can be received is shorter).

Home equity lines and loans are somewhat difficult to obtain in the current market and so the issue is often whether access to the product is available at all. Home equity loans tend to be fixed term and thus carry higher rates than lines of credit, which are typically adjustable rates.

Subsidized financing options also have a range of rates and terms. The OHA/FHB Malama loan has a rate of five percent. The Council for Native Hawaiian

Advancement has a loan for solar hot water systems that carries a fixed rate of six percent.

PUC-IR-339 – To Solar Alliance and HREA

According to page 8 of the HECO Companies' proposed Schedule FIT Tier 1 and Tier 2 Tariff and Agreement:

> "Development costs, permitting costs, and interconnection & electrical costs for Tier I were developed from the NREL Bergey study, which details the line-by-line cost of installation of 10-kW Bergey turbines at a variety of locations in the Pacific Northwest."

Were the interconnection costs developers incurred in the NREL study comparable to those that the HECO Companies propose? How else might the costs in Hawaii be different from those in the Pacific Northwest? Describe any adjustments made to reconcile such differences when calculating rates.

SA/HSEA Response:

SA/HSEA are not familiar with the interconnection costs of wind projects and, thus, defer to HREA on these issues.

CERTIFICATE OF SERVICE

The undersigned hereby certifies that, on this date, a copy of the foregoing document was duly served by first-class postage prepaid mail and electronic mail to the following parties addressed as follows:

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The undersigned hereby certifies that, on this date, a copy of the foregoing document was duly served by electronic mail to the following parties addressed as follows:

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